



A comparative analysis of Island and Mainlands smallholder farmers and crofters: evidence from the large scale farmer intentions survey

Authors

Jenny McMillan¹, Andrew Barnes^{1*}, Hernan Degiovanni¹, Steven Thomson¹, Jon Hopkins¹, Lee-Ann Sutherland²

Summary

Smallholder farming and crofting contributes to the economic development of rural areas and can benefit biodiversity through generally lower intensive management practices. We compare the characteristics, past behaviours and intentions for investments between the islands and the mainland. Using the farmer intentions survey - a survey of 2,494 Scottish farmers conducted in 2018 – and defining smallholders and crofters as those managing a business or holding of under 30 hectares, we find that there are differences in characteristics, management influences and investment behaviours between the two groups based on their location. These include:

- Those on Scottish islands are slightly younger than their mainland counterparts and a lower proportion of decision makers are female;
- Smallholder farmers and crofters on Scottish islands are more likely to be tenants (38%) compared to those on the mainland (19%);
- Farmers on the mainland are more likely to obtain more than half of their household income from farming (17%), compared to 8% of those on Scottish islands;
- Changes in input prices and commodity prices have resulted in significant management changes for a slightly higher proportion of smallholders and crofters on the islands;
- Past investments were generally similar between mainland and island cohorts, however higher proportions of mainland farmers and crofters had invested in renewable energy in the period 2013-2018 and, also, planned to invest in the next five years (2018-2023).
- Diversification is revealed to be of increasing importance to smallholder crofters and farmers on both the mainland and islands, in particular to island smallholders and crofters obtaining a low percentage of their household income from farming or crofting.

Future agricultural policy for Scotland should aim to address the challenges faced by smallholders and crofters on islands and the mainland and how investment in agricultural and environmental capital by these groups can encourage both productivity gains whilst meeting climate and biodiversity targets in the future.

¹Department of Rural Economy, Environment and Society, SRUC, West Mains Road, Edinburgh, UK

²Social, Economic and Geographical Sciences Group, James Hutton Institute, Aberdeen, UK



Scottish Government
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gov.scot



1.0 Introduction

Agriculture has been highlighted as an important driver of sustainable economic development within Scotland's islands (Scottish Government, 2019). Smallholder farming and crofting will also contribute to improve biodiversity through low-intensity management (Scottish Government, 2021a). However, island communities can be faced with constraints such as higher costs and infrastructure disadvantages (Scottish Government, 2020) with the potential to lead to abandonment. As crofters and smallholders operate smaller enterprises, diversification can be seen as an attractive opportunity to increase incomes and diversification itself has been found to be increasingly important to farm incomes in recent years (Scottish Government, 2021b).

The purpose of this briefing is to present results from a farmer intentions survey to understand differences in the characteristics of smallholder farmers and crofters, defined here as holdings or businesses under 30 hectares, on Scottish islands and on the mainland. Comparing smallholdings or crofts under 30ha on the islands with those on the mainland allows for comparison between similar sized enterprises to reveal differences between characteristics, management influences and investment behaviour.

2.0 Method

A telephone-based survey of Scottish farmers, crofters and smallholders was conducted over the summer of 2018. A spatially representative sample of 11,000 businesses was selected using information from the Scottish Government's June Agricultural Census (JAC) stratified by region, business size and farm type. For a large scale survey such as this, the JAC sampling framework is the most appropriate as it gives national level coverage and detailed information on agricultural activity and it means that background information requirements are minimised. As the JAC reports at an agricultural holding level the data was aggregated (where appropriate) to business level¹ in order to ensure the sampling framework was as representative of Scottish agriculture as possible.

2,494 farmers, crofters and smallholders engaged with the survey in total. 540 of these were crofters and smallholders managing a holding of less than 30 hectares. Of these, 382 were located on the Scottish mainland and 158 were located on Scottish islands with these two groups the focus for this briefing.

The FIS collected information on both past activities and future intentions. A number of these relate to investment behaviour both on and off-farm. We categorise investment behaviour into a) agricultural production capital, i.e. investment into new capital, new technologies, b) environmental activities, i.e. investment into agroforestry and renewables, and c) diversification i.e. diversification activities and specifically tourism/other recreation. Farmers were asked a series of questions concerning their past behaviour (pre-2018) and their future intended behaviour towards these activities.

¹ A farm or croft business may be made up of multiple agricultural holdings

3.0 Results

3.1 Characteristics of small-scale farmers and crofters on Scottish islands and the mainland

Table 1 shows the characteristics of smallholders and crofters located on islands and those on the mainland. The results are presented as percentages per column to highlight the differences between the two groups. In summary the results reveal:

- Smallholders and crofters on Scottish islands are slightly younger than their mainland counterparts (10% more are under 45 and 4% less are 65 and over);
- Smallholder farmers and crofters on islands are more likely to be tenants (56%) whilst those on the mainland are much more likely to own their business/holding (83%);
- A higher proportion of smallholders and crofters on islands had inherited their holding (59%) compared to 31% of those on the mainland;
- Smallholders and crofters on the mainland are more likely to obtain over 50% of their household income from farming (17%) compared with those on islands (8%);
- A higher proportion of farmers on the mainland have a university education, with similar proportions in both locations having a college education;
- There are around 6% more female decision maker smallholder farmers and crofters on the mainland than the islands;
- 16% of holdings/businesses on the mainland were classified as non-LFA - none of those of those on islands were non-LFA.; and
- 45% of smallholders and crofters on islands confirmed they had received Single Farm Payment (SFP) in 2013 compared with 36% of those on the mainland (around 2% of each group did not provide a response to this question).

Table 1. General characteristics of response by location, column percentages and significance

		<30 hectares Islands	<30 hectares Mainland	Significant Difference
% household income from farming	Zero	45%	43%	*
	<25%	40%	31%	
	25-50%	7%	9%	
	>50%	8%	17%	
Inherited the farm	No	41%	69%	***
	Yes	59%	31%	
Has a succession plan in place	Too early	22%	14%	*
	No	29%	41%	
	Yes	49%	45%	
Years experience	<10 years	30%	35%	
	10-20 years	24%	19%	
	>20 years	46%	46%	
Highest qualification level	School	36%	29%	
	College	35%	32%	
	University	29%	39%	
Farming System	Arable	3%	10%	**
	Livestock	52%	49%	
	Mixed	46%	40%	
Tenure	Mixed	8%	4%	***
	Owned	36%	83%	
	Tenant	56%	14%	

LFA	LFA	0%	38%	***
	Non-LFA	100%	61%	
Receives Subsidy	No	55%	64%	
	Yes	45%	36%	
Age	<45	21%	11%	**
	45-64	45%	51%	
	65 & over	34%	38%	
Gender	Female	36%	43%	
	Male	63%	57%	
New Entrant	Established	85%	89%	
	New Entrant	15%	11%	

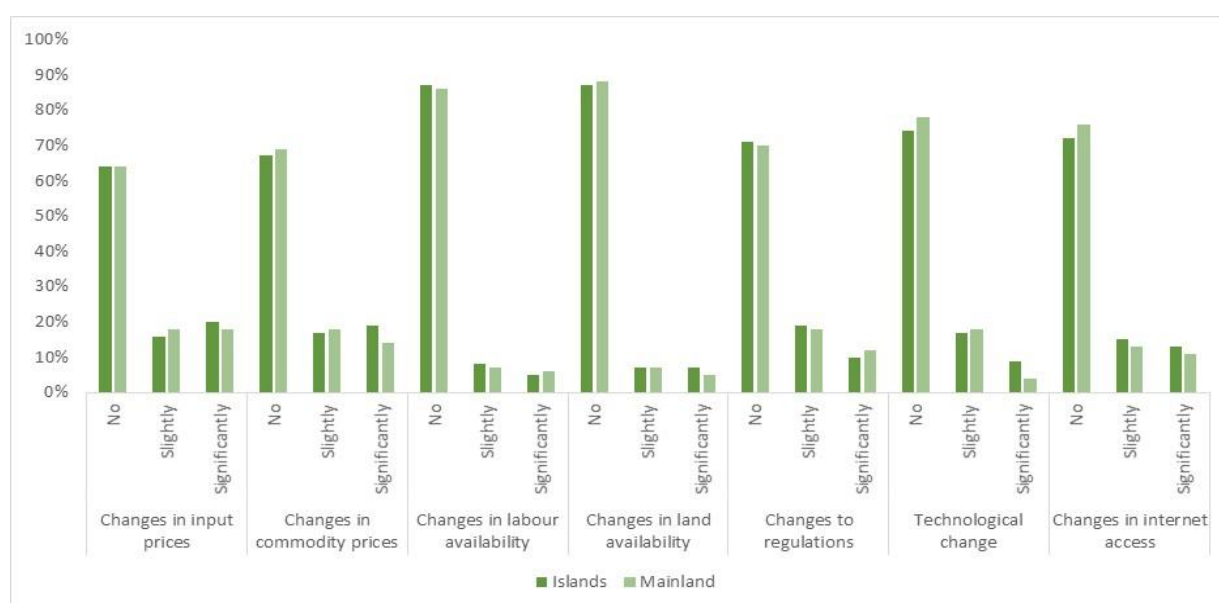
* significantly different at 0.05; ** significantly different at 0.01; *** significantly different at 0.001

3.2 Factors influencing management of business/holding

Respondents were asked their views towards the influence of a range of factors on the management of their business/holding in relation to input and commodity prices, availability of land and labour, changes to regulations, technology and internet access, among others. Overall, the most common response was that these had no influence on how their business was managed over the period 2013-2018. However, around 5 to 20% of respondents identified some effect from these factors.

The greatest impact on management were changes in input and commodity prices. A slightly higher proportion of smallholders and crofters on the islands (20%) compared to the mainland (18%) answered that changes in input prices had significantly changed the way they managed their business or holding. There were similar findings for commodity prices where 19% of those on the islands answered that changes had significantly changed the way they managed their business or holding compared to the mainland (14%). A slightly higher percentage of those on the islands (13%) compared the mainland (11%) felt that changes in internet access had influenced management of their business or holding. 9% of smallholders or crofters on the islands felt that technological change had significantly influenced the management of their business or holding, this compared with 4% of those on the mainland. However, there were no significant differences in the prioritisation of factors between the mainland and islands.

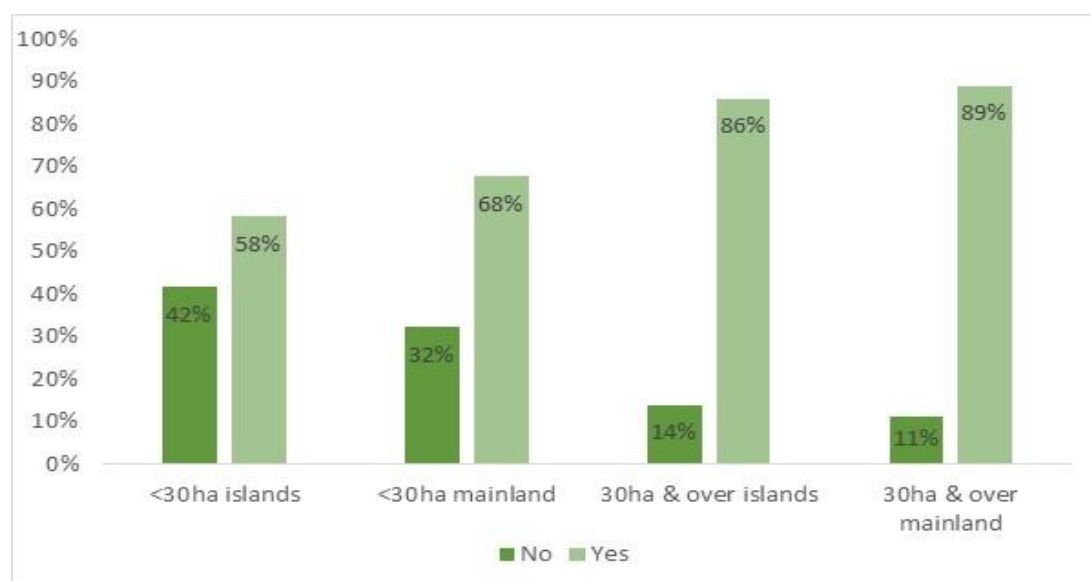
Figure 1. Influence of factors on the management of business/holding in the period 2013-18.



3.3 Investment Behaviour

Figure 2 reveals that in the period 2013-2018 for both island and mainland locations smallholders and crofters under 30ha had reinvested in buildings and machinery less than those with businesses/holdings of 30ha and over, affirming that size is a determinant of levels of investment (Barnes et al, 2021). There are also differences in the level of investment between the islands and mainland, with 10% higher levels of reinvestment on mainland businesses/holdings under 30ha compared to those on the islands.

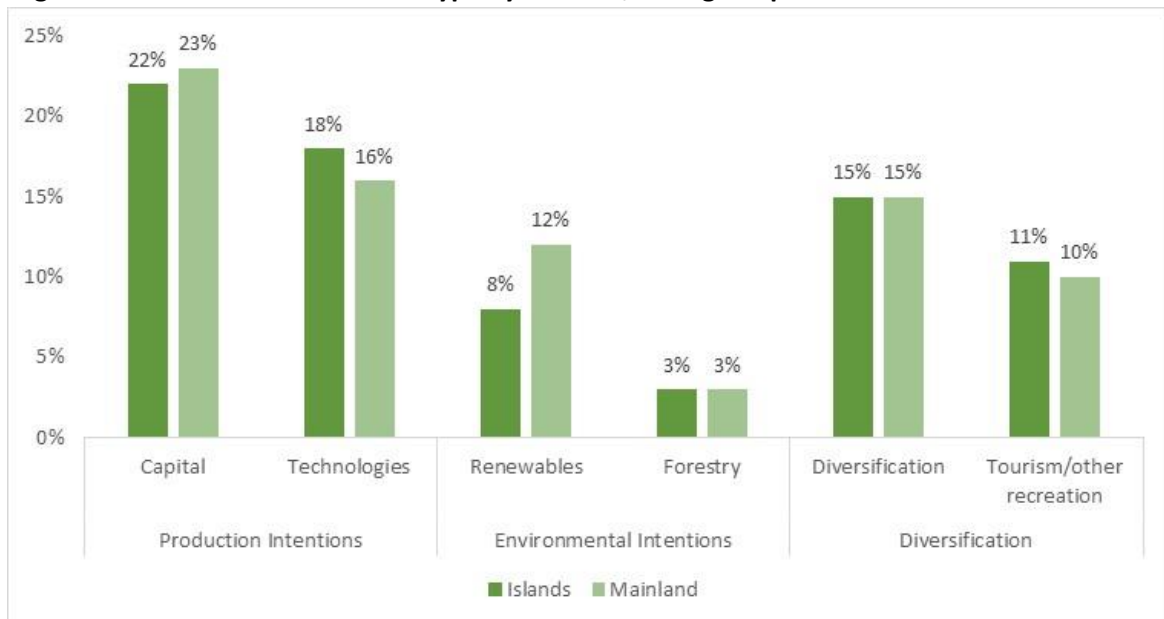
Figure 2. Reinvestment activity over the period 2013- 2018, percentage by location



3.4 Previous Investment Behaviour

Figure 3 shows the three main categories of investment: We categorise investment behaviour into a) agricultural production capital, i.e., investment into new capital, new technologies, b) environmental activities, i.e. investment into agroforestry and renewables, and c) diversification i.e. diversification activities and tourism/other recreation. It reveals a diversity between production related investments between the mainland and islands, a higher proportion of investment towards renewables in the mainland but little difference in agroforestry or diversification investment.

Figure 3. Increases in investment type by location, during the period 2013-2018



3.5 Intended Investment Behaviour

Figure 4 shows respondents’ intended investment behaviour over the period 2018-2023. Intentions to invest in agricultural capital remain at the same level for both groups and similar to the investment levels of the past five years. However, intentions to invest in technologies is 7% higher for those on the mainland. Intentions to invest in forestry is three times higher for both groups than previous investment over 2013-2018, while intentions to invest in renewables is nearly double that of past investment for both groups. Intentions for diversification investments are also higher than in the past five years – intentions for investment in diversification are 10% higher for both groups whilst tourism or other recreation investment intentions is double that of the previous five years for both groups, highlighting the importance of diversification to smallholders and crofters.

Figure 4. Intentions to increase investment in the next five years, percentage by location

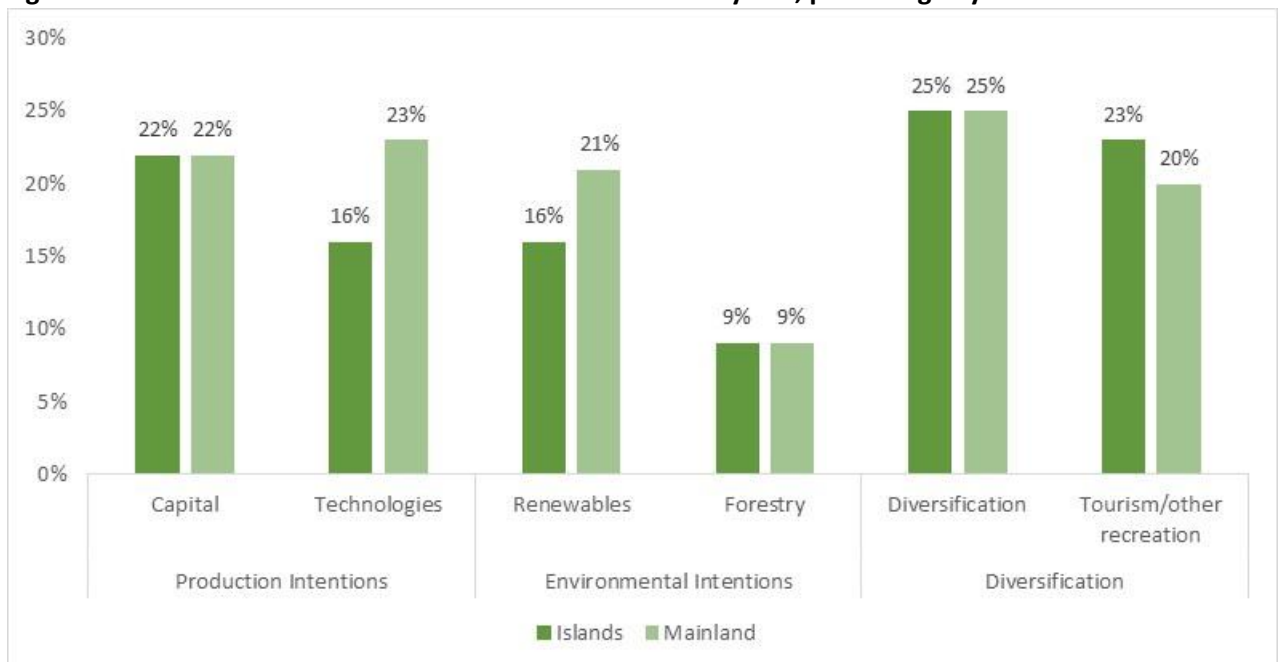


Figure 5: Intentions to increase investment in diversification and tourism/recreation by household income

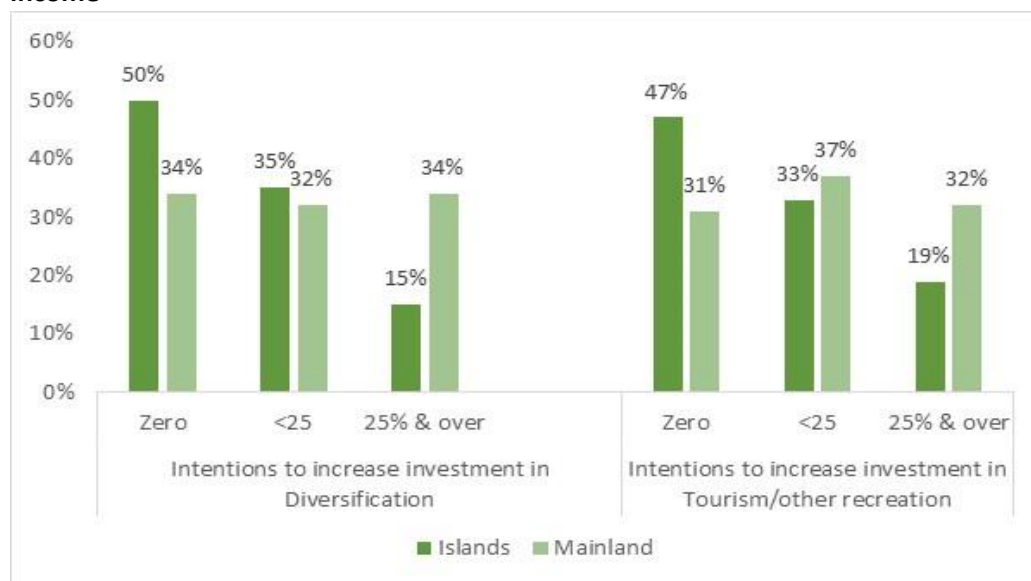


Figure 5 reveals that in relation to intentions to increase investment in diversification and tourism/other recreation, there was little difference in intentions of those on the mainland related to their household income from farming/crofting. However, for smallholders and crofters on the islands, 50% and nearly 50% of those with zero household income from farming/crofting planned to increase investment in each of these areas and around a third of those obtaining less than 25% of their household income from farming/crofting intended to increase investment. This highlights the importance of diversification activities to smallholders and crofters in general and in particular to those generating no or zero incomes from their smallholding or croft on the islands.

4.0 Summary

Although managing smallholdings and crofts of a similar size, there are different characteristics but some commonalities between islands and mainland. This is notable with those on the mainland having a higher proportion with a household income over 50% from farming and crofting. Smallholders and crofters on the islands are more likely to have inherited their holding, whilst there are a lower proportion of female decision makers. Changes in input and commodity prices between 2013 and 2018 whilst generally not seen as an effect, for around a fifth of the sample these had significantly influenced management decisions for smallholders and crofters on islands slightly more so than those on the mainland.

Reinvestment in buildings and machinery was substantially lower for small (<30ha) farms and crofts compared to larger businesses (> 30ha) across Scotland. For both smallholders and crofters on the mainland and islands, investment decisions in the period 2013-2018 were generally similar aside for a higher level of investment in renewables on the mainland, whilst diversification investments were of increased importance to both those on the islands and the mainland for 2018-2023. In particular, diversification activity is important for island smallholders and crofters who obtain low household incomes from farming or crofting.

5.0. References

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For further details please contact:


Andrew Barnes 

: +44(0)131 535 4042

: andrew.barnes@sruc.ac.uk

or

Jenny McMillan 

: +44(0)131 535 4212

